

Amendments to the Claims:

This listing of claims replaces all prior versions and listings of claims in the application:

Listing of Claims:

1. (Currently Amended) A printing apparatus [(10)] including a carrier ribbon supply spool [(12)] and a carrier ribbon take-up spool [(16)], a print head [(22)] having a plurality of heating elements which are individually addressable and energisable selectively to remove pixels of marking medium from the carrier ribbon [(14)] during a printing operation, a first motor [(13)] which when the printing apparatus [(10)] is operated in a first configuration, moves the print head [(22)] during a printing operation relative to a substrate [(15)] on which an image is to be printed, and when the apparatus [(10)] is operated in a second configuration, the first motor [(13)] moving the carrier ribbon [(14)] relative to the print head [(22)] during a printing operation, and there being a second motor [(25)] which is operative when the printing apparatus [(10)] is operated in the first and second configurations to advance carrier ribbon [(14)] from which pixels of marking medium have been removed in a previous printing operation, onto the carrier ribbon take-up spool [(16)], the printing apparatus [(10)] being configurable to either of the first and second configurations.

2. (Currently Amended) An apparatus according to claim 1 [characterised in that] - wherein - the first motor [(13)] moves the print head [(22)] when operated in the first configuration and the carrier ribbon [(14)] when operated in the second configuration, via a transmission [(26, 27)], the carrier ribbon [(14)] being disconnected from the transmission [(26, 27)] in the first configuration and the print head [(22)] being disconnected from the transmission [(26, 27)] in the second configuration.

3. (Currently Amended) An apparatus according to claim 2 [characterised in that] - wherein - the transmission [(26, 27)] includes a rotary to linear drive transfer mechanism whereby in the first configuration the print head [(22)] is carried by a linearly movable part [(27)] so as to be moved linearly during a printing operation along the carrier ribbon (14), and in the second configuration the carrier ribbon [(14)] is entrained around guides [(35, 36)] on the linearly movable part [(27)] and around immovable guides [(17, 37, 38, 39)] so that as the linearly movable part [(27)] moves during a printing operation, the carrier ribbon [(14)] is moved relative to the print head [(22)].

4. (Currently Amended) An apparatus according to claim 3 [characterised in that] - wherein - when the printing apparatus [(10)] is operated in the second configuration, and the substrate [(15)] moves relative to the print head [(22)] in a first direction [(A)], the linearly movable part [(27)] is moved in a second linear direction opposite to the first direction [(A)] to move the carrier ribbon [(14)] in the same direction as the substrate [(15)] and vice versa, and where the substrate [(15)] moves in the first direction [(A)], inbetween printing operations, a length of the carrier ribbon [(14)] is moved past the print head [(22)] which is generally equal to the length of carrier ribbon [(14)] used in the preceding printing operation plus the length of carrier ribbon [(14)] to be used for the next printing operation.

5. (Currently Amended) An apparatus according to claim 4 [characterised in that] - wherein - when the substrate [(15)] moves relative to the print head [(22)] in a second direction opposite to the first direction [(A)], inbetween printing operations the carrier ribbon [(14)] is generally stationary relative to the print head [(22)].

6. (Currently Amended) An apparatus according to claim 5 [characterised in that] - wherein - there is a peeler device [(24)] associated with the print head [(22)] which is operable to assist in the removal of pixels of marking medium from the carrier ribbon [(14)] and when the apparatus [(10)] is operated in the second configuration and the carrier ribbon [(14)] and substrate [(15)] are moved in the first direction [(A)] relative to the print head [(22)] during a printing operation the print head [(22)] and associated peeler device [(24)] are positioned in a first position such that the carrier ribbon [(14)] is entrained about the peeler device [(24)] so as to pass over the peeler device [(24)] during a printing operation subsequent to passing the print head [(22)], and when the apparatus [(10)] is operated in the second configuration and the carrier ribbon [(14)] and substrate [(15)] are moved in the second direction relative to the print head [(22)] during a printing operation the print head [(22)] and associated peeler device [(24)] is positioned in a first position such that the carrier ribbon [(14)] is entrained about the peeler device [(14)] so as to pass over the peeler device [(24)] during a printing operation subsequent to passing the print head [(22)].

7. (Currently Amended) An apparatus according to [any one of the preceding claims characterised in that] - claim 1 wherein - the second motor [(25)] is coupled to the take-up spool [(16)] via an overdrive clutch and the second motor [(25)] drives a drive roller [(17)] around which the carrier ribbon [(14)] is entrained, whereby the carrier ribbon [(14)] may be advanced onto the take-up spool [(16)] when the drive roller [(17)] is driven.

8. (Currently Amended) An apparatus according to [any one of the preceding claims characterised in that] - claim 1 wherein - the supply [(12)] and take-up spools [(16)], and guides [(17, 18, 19, 20)] which guide the carrier ribbon [(14)] at least partially along a carrier ribbon feed path are mounted on a base [(11)], and a transmission [(26, 27)] which includes a rotary to linear drive transfer mechanism is also mounted on the base [(11)] whereby in the first configuration the print head [(22)] is carried by a linearly movable part [(27)], the apparatus [(10)] being re-configurable from the first to the second configuration by disconnecting the

transmission [(26, 27)] from the print head [(22)], fixing the print head [(22)] relative to the base [(11)], and entraining carrier ribbon [(14)] around guides [(35, 36)] on the linearly movable part and around guides [(17, 18, 19, 20)] which are immovable relative to the base [(11)].

9. (Currently Amended) A printing apparatus according to [any one of the preceding claims characterised in that] - claim 1 wherein - when the apparatus [(10)] is operated in at least the first configuration, the print head [(22)] is moved towards the adjacent carrier ribbon [(14)] and substrate [(15)] during printing to urge the carrier ribbon [(14)] towards the substrate [(15)], and the print head [(22)] is moved away from the carrier ribbon [(14)] and substrate [(15)] after printing, and wherein the print head [(22)] movement towards and away from the carrier ribbon [(14)] is achieved as the print head [(22)] is moved by the first motor [(13)] by mechanical guide means including a cam and track.

10. (Currently Amended) A printing apparatus including a carrier ribbon supply spool [(12)] and a carrier ribbon take-up spool [(14)], a print head [(22)] having a plurality of heating elements which are individually addressable and energisable selectively to remove pixels of marking medium from the carrier ribbon [(14)] during a printing operation, a first motor [(13)] to move the carrier ribbon [(14)] relative to the print head [(22)] during a printing operation, and a second motor [(25)] to advance carrier ribbon [(14)] from which pixels of marking medium have been removed in a previous printing operation, onto the carrier ribbon take-up spool [(14)], [characterised in that] - wherein - the carrier ribbon [(14)] is moved past the print head [(22)] inbetween printing operations to advance used ribbon onto the take-up spool [(16)] in a direction opposite to the direction the ribbon [(14)] is moved during a printing operation, and inbetween printing operations, a carrier ribbon [(14)] length is advanced past the print head [(22)] generally equal to the length of carrier ribbon [(14)] used in the preceding printing operation plus the length of carrier ribbon [(14)] to be used for the next printing operation.

11. (Currently Amended) A printing apparatus according to claim 10 [which has any of the features of the printing apparatus [(10)] according to any one of claims 1 to 9] - wherein the printing apparatus is configurable alternatively in first and second configurations and in the first configuration the first motor, during printing, moves the print head relative to a substrate on which an image is to be printed, and in the second configuration the first motor, during printing, moves the carrier ribbon relative to the print head -.

12. (Currently Amended) A printing apparatus including a carrier ribbon supply spool [(12)] and a carrier ribbon take-up spool [(16)], a print head [(22)] having a plurality of heating elements which are individually addressable and energisable selectively to remove pixels of marking medium from the carrier ribbon [(14)] during a printing operation, a first motor [(24)] to move the carrier ribbon [(14)] relative to the print head [(22)] during a printing operation, and a second motor [(25)] to advance carrier ribbon [(14)] from which pixels of marking medium have been removed in a previous printing operation, onto the carrier ribbon take-up spool [(16), characterised in that] - wherein - in a first mode of operation when the substrate [(15)] moves relative to the print head [(22)] during a printing operation in a first direction [(A)], the carrier ribbon [(14)] moves in the same direction as the substrate [(15)], and in a second mode of operation when the substrate [(15)] moves relative to the print head [(22)] during a printing operation in a second direction, the carrier ribbon [(14)] moves in the same direction as the substrate [(15)], and in the first mode of operation where the substrate [(15)] moves in the first direction [(A)] during a printing operation, inbetween printing operations, a length of the carrier ribbon [(14)] is advanced past the print head [(22)] which is generally equal to the length of carrier ribbon [(14)] used in the preceding printing operation plus the length of carrier ribbon [(14)] to be used for the next printing operation, and in the second mode of operation when the substrate [(15)] moves relative to the print head in a second direction during a printing operation, inbetween printing operations the carrier ribbon [(14)] is generally stationary relative to the print head [(22)].

13. (Currently Amended) A printing apparatus according to claim 12 [having any of the features of the printing apparatus of any one of claims 1 to 11] - wherein the printing apparatus is configurable alternatively in first and second configurations and in the first configuration the first motor, during printing, moves the print head relative to a substrate on which an image is to be printed, and in the second configuration the first motor, during printing, moves the carrier ribbon relative to the print head -.

14. (Currently Amended) A printing apparatus including a carrier ribbon supply spool [(14)] and a carrier ribbon take-up spool [(16)], a print head [(22)] having a plurality of heating elements which are individually addressable and energisable selectively to remove pixels of marking medium from the carrier ribbon [(14)] during a printing operation, the print head [(22)] being movable towards the adjacent carrier ribbon [(14)] and substrate [(15)] during printing to urge the carrier ribbon [(14)] towards the substrate [(15)], and the print head [(22)] is moved away from the carrier ribbon [(14)] and substrate [(15)] after printing, and wherein the print head [(22)] movement towards and away from the carrier ribbon [(14)] is achieved as the print head [(22)] is moved by the first motor [(24)] via mechanical guide means including a cam - carried by the print head - and - a track - provided on a base relative to which the print head, in use, moves -.

15. (Canceled)

16. (Currently Amended) A method of printing using a printing apparatus [(10)] including a carrier ribbon supply spool [(14)] and a carrier ribbon take-up spool [(16)], a print head [(22)] having a plurality of heating elements which are individually addressable and energisable selectively to remove pixels of marking medium from the carrier ribbon [(14)] during a printing operation the carrier ribbon [(14)] being movable relative to the print head [(22)] during a printing operation, and there being a motor [(25)] to advance carrier ribbon from which pixels of marking medium have been removed in a previous printing operation, onto the

carrier ribbon take-up spool [(16), characterised in that] - wherein - the method includes moving the substrate [(15)] relative to the print head [(22)] during a printing operation in a first direction [(A)], and moving the carrier ribbon [(14)] in the same direction as the substrate [(15)], and moving the carrier ribbon [(14)] inbetween printing operations in a second opposite direction, the method including, inbetween printing operations, advancing a length of the carrier ribbon [(14)] past the print head [(22)] which is generally equal to the length of carrier ribbon [(14)] used in the preceding printing operation plus the length of carrier ribbon [(14)] to be used for the next printing operation.

17.-19. (Canceled)